

**REMARKS**

Applicant acknowledges receipt of an Office Action dated July 13, 2004. In this response Applicants have amended the preamble of claim 2 for consistency with the body of the claim. Following entry of these amendments, claims 2-18 are pending in the application. Claims 3-17 have been withdrawn from consideration as being drawn to non-elected subject matter.

Reconsideration of the present application is respectfully requested in view of the foregoing amendments and the remarks which follow.

**Objection to the Specification**

On page 2 of the Office Action, the PTO has objected to the specification as failing to provide proper antecedent basis for the subject matter of claim 18. As an initial matter, Applicant notes that the subject matter of claim 18 finds full support in Figure 2C. In this response, Applicant has amended the specification, between lines 19 and 20 on page 9, to insert the following text:

As depicted in Figure 2C, the plurality of holes may comprise a first hole, a second hole and a third hole arranged in sequence along a line without intervening holes and wherein the distance between the first hole and the second hole is different than the distance between the second hole and the third hole.

In view of this amendment, Applicants respectfully request reconsideration and withdrawal of the outstanding objection to the specification.

**Rejections Under 35 U.S.C. § 112**

On page 2 of the Office Action, the PTO has rejected claims 1 and 18 under 35 U.S.C. § 112, second paragraph, as being indefinite.

As an initial matter, Applicants note that claim 1 was previously cancelled. Applicants presume that the reference to claim 1 in the Office Action was intended to be a reference to claim 2.

In this response, Applicants have amended the preamble of claim 2 to recite “[a] cooling device for cooling a plurality of heat sources” so that the language of the preamble is consistent with the language of the claim.

In view of this amendment, Applicants respectfully request reconsideration and withdrawal of the outstanding rejection under §112.

### **Rejections Under 35 U.S.C. §102/103**

On page 3 of the Office Action, the PTO has rejected claims 1 and 18 under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. Patent 5,316,075 to Quon *et al.* (hereafter “Quon”). Applicants respectfully traverse these rejections for the reasons set forth below.

As discussed above, Applicants presume that the reference to claim 1 in the Office Action was intended to be a reference to claim 2 inasmuch as claim 1 was previously cancelled.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). See generally MPEP §2131.

Also, to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 180 USPQ 580 (CCPA 1974). See MPEP §2143.03.

Here, Quon fails to disclose, teach or suggest the presently claimed “plurality of heat sources” set forth in claim 2. Further, with particular regard to claim 18, Applicants submit that the Quon fails to disclose, teach or suggest a cooling device “ wherein the plurality of holes comprises a first hole, a second hole and a third hole arranged in sequence along a line without intervening holes and wherein the distance between the first hole and the second hole is different than the distance between the second hole and the third hole.”

In the Office Action, the PTO has suggested that Quon discloses a plurality of heat sources relying, apparently, on lines 47-48 in column 2 which refers to “a semiconductor device, with one or more semiconductor junctures therein.” Applicants note that the figures

of Quon depict only a single semiconductor device and that Quon provides no further disclosure with respect to the “one or more semiconductor junctures.”

While the PTO is entitled to give claim terms their broadest reasonable interpretation, that interpretation must be *reasonable*, meaning that the “interpretation must be consistent with the one that those of skill in the art would reach.” *In re Cortright*, 49 USPQ2d 1464, 1467 (Fed. Cir. 1999). Here, with respect to claim 2, Applicants submit that an interpretation of “one or more semiconductor junctures” from a single semiconductor device as being “a plurality of heat sources” is not consistent with the interpretation one skilled in the art would reach. Accordingly, Applicants respectfully submit that the outstanding rejection is improper and ought to be withdrawn.

Further, with respect to claim 18, the PTO has that the claimed holes “arranged in sequence along a line” encompass the arrangement depicted on page 4 of the specification. Applicants submit that this is another example of the PTO applying an interpretation of the claims which extends beyond the broadest *reasonable* interpretation. Applicants note, for example, that the “peripheral line” depicted on page 4 of the office action is not straight and that it is not possible to draw a straight line through the three points referenced in the Office Action. For this reason, Applicants submit that the rejection of claim 18 is improper and ought to be withdrawn.

In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of the rejections under §102/103.


### CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully submits that all of the pending claims are now in condition for allowance.

An early notice to this effect is earnestly solicited. If there are any questions regarding the application, the Examiner is invited to contact the undersigned at the number below.

Respectfully submitted,

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The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. § 1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.